BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of)	
PUBLIC UTILITIES COMMISSION)	DOCKET NO. 2008-0273
Instituting a Proceeding to Investigate the Implementation of Feed-in Tariffs.)))	
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PUBLIC UTILITIES

TAWHIRI POWER LLC'S COMMENTS TO SCOPING PAPER;

EXHIBIT "A"

AND

CERTIFICATE OF SERVICE

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OF THE STATE OF HAWAII

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TAWHIRI POWER LLC'S COMMENTS TO SCOPING PAPER

TO THE HONORABLE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII:

TAWHIRI POWER LLC ("TPL") hereby submits to the Hawaii Public Utilities

Commission (the "Commission") its comments on the Scoping Paper on feed-in tariffs, "Feed-in Tariffs: Best Design Focusing Hawaii's Investigation", issued by the Commission on December 11, 2008. TPL's comments are by its consultant, Dr. Mohamed El-Gasseir., and are attached as Exhibit "A" to this filing. Dr. El-Gasseir has extensive experience and knowledge in regards to:

(1) the HECO systems; (2) electric industry restructuring; (3) stranded assets, revenue dynamics and rate stability issues; (4) renewable energy economics; (5) distributed resources planning; (6) self-generation assessment; and (7) integrated resource planning. These areas of expertise are part of the knowledge base that would be needed in the consideration of feed-in tariffs.

Additionally, Dr. El-Gasseir has advised regulatory and planning commissions for the States of California, New York, Connecticut, New Jersey, and Nevada. He has also been engaged by many utilities, including some of the largest investor-owned companies such as Con Edison of

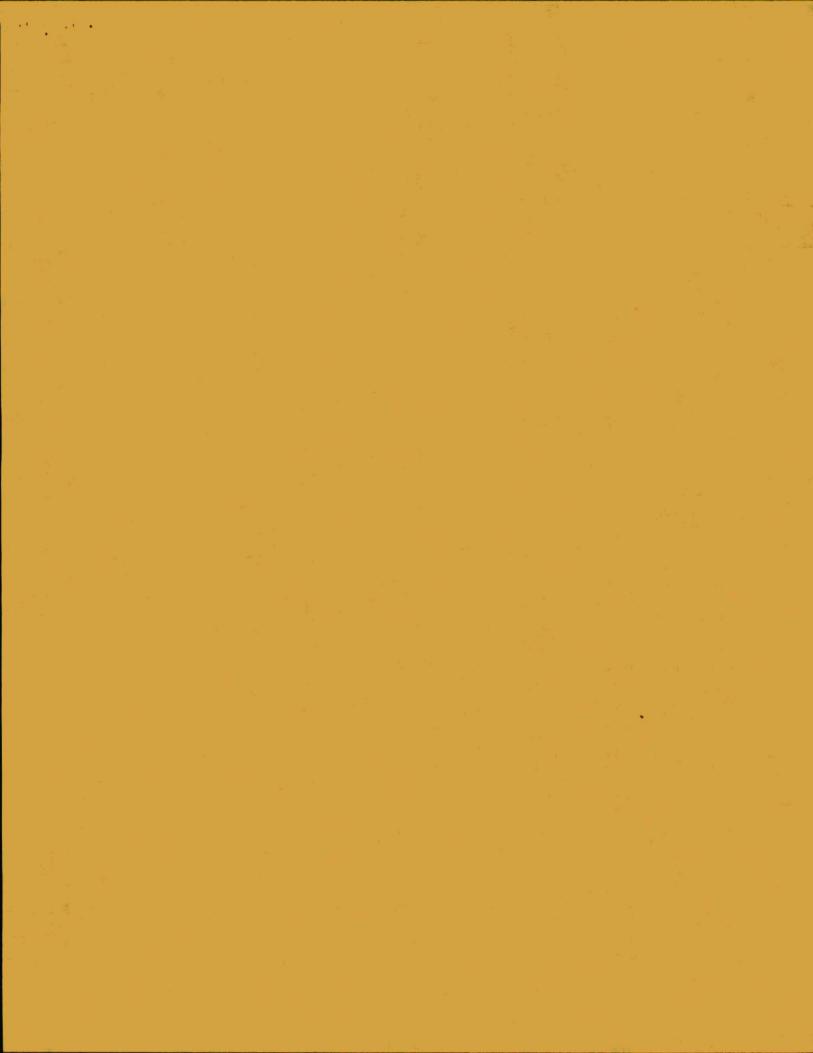
New York, Commonwealth Edison of Chicago, Pacific Gas & Electric Company, Detroit Edison, Southern Energy, and British Columbia Hydro (to name a few).

Respectfully submitted.

DATED: Honolulu, Hawaii, December 31, 2008.

HARLANY. KIMURA

Attorney for Movant Tawhiri Power LLC



Response to NPRI Paper on Feed-in Tariffs in Docket No. 2008-0273 By Mohamed M. El-Gasseir, Ph.D. on behalf of Tawhiri Power LLC

Tawhiri Power LLC ("TPL") commends the Public Utilities Commission of Hawaii ("Commission") for sponsoring the scoping paper prepared by its consultant the National Regulatory Research Institute ("NRRI") on feed-in tariff ("FiT") design issues. The paper provides an excellent starting point for identifying and discussing the proper conditions and requirements for designing and implementing an <u>efficient and equitable</u> FiT for Hawaii. However, perhaps due to lack of time and the very sparse experience with FiT development and practices in the U.S., the NRRI paper has a number of limitations including:

- Key FiT threshold design and implementation issues have not been addressed;
- Insufficient attention to some of the identified issues as the paper was focused on one particular form of FiTs, namely the Project-Based FiT ("PBFiT");
- A tacit endorsement of an inadequate FiT implementation schedule advocated by the HECO Companies and the Consumer Advocate ("Sponsoring Parties"); and
- An impracticable approach to soliciting information from potential developers.

1. Summary of TPL's Principal Recommendations

As discussed in the ensuing sections of this submittal, TPL recommends the following:

- 1. Allow more time to conduct a thorough and open evaluation of the potential direct and indirect impacts on ratepayers of implementing PBFiTs at a scale and pace greater than pilot projects. (Direct impacts will be caused by the need to subsidize new FiT contracts. The indirect ones will reflect the costs of potential stranded assets and curtailment of renewable generation priced at unsubsidized avoided utility costs.)
- 2. If allowing more time for FiT development and implementation is not possible, the Commission should limit PBFiTs to pilot-scale programs for the promising options.
- 3. If the Commission must immediately venture beyond pilot-scale PBFiTs, then it should adopt a total (all technologies) cap for each HECO Company equal to each utility's projected increase in electricity demand over the ensuing 12 months.
- 4. Irrespective of the adopted scale of development or cap levels, the Commission should institute a policy of *do-no-harm* to prevent curtailment of renewable energy production from existing avoided-cost priced resources and to compensate the owners of such resources in cases where curtailment cannot be circumvented.
- 5. To eliminate conflict of interest, affiliates of the HECO Companies should be barred from doing business through PBFiTs.
- 6. To maximize participation by developers and to enhance the accuracy and value of their data responses, the Commission should solicit the technical and cost information it needs for designing sound and fair PBFiTs through a blind process administered by a neutral, competent agent (e.g., a reputable accounting firm). The Commission's protective order is not likely to induce prospective developers to provide accurate and meaningful confidential information for useful application in the FiT proceeding.



2. Missing Threshold Issues

In our opinion, a threshold issue is one whose outcome could significantly impact further development of a FiT program in Hawaii or even hinder it completely. The subject paper has correctly identified two categories of such issues. One category involves "legal" questions pertaining primarily to potential conflicts with the Public Utilities Regulatory Policies Act ("PURPA"). The second pertains to policies regarding "other incentives" for encouraging renewable energy development.

There are four more issues that deserve immediate focus as threshold questions since the outcome of their consideration is bound to significantly determine the objectives, design and timing of a Hawaiian FiT program. They are:

- 1. Should Hawaii's PBFiT program be part of a <u>wider and balanced strategy</u> to minimize the production of greenhouse gases (GHG) and dependence on imported fuels <u>at least cost</u> to the public and to Hawaii's economy?
- 2. Is it proper to allow HECO Companies' affiliates to sell power to HECO under a PBFiT program?
- 3. Should PBFiTs be confined to generation interconnected at distribution voltage levels?
- 4. Can the Commission proceed with a pilot-scale PBFiT program before engaging in a wider experiment with little information to rely on?

In fairness to the NRRI, the scope of the paper was apparently limited by design. It should also be noted that the first two topics were considered albeit indirectly and not as threshold issues.

We urge the Commission to seriously consider the aforementioned additional questions for the following reasons:

- One cannot pursue the minimization of GHG production and of dependence on imported fuels without seeking to achieve these concomitant goals at least cost to consumers. This means designing a PBFiT program that is part of a carefully balanced portfolio of power acquisition options which collectively can reasonably assure ratepayers of a minimally painful transition to new resources and technologies. Such portfolio would consist of existing and future bulk-power purchases at negotiated or bid prices, avoided cost based contracts, and future PBFiT supplies. Continued reliance on a balanced basket of preferred-resource options is essential considering the proposed FiT regime is a regulatory mechanism to encourage renewable energy development by guaranteeing prices at cost-plus rates. Ensuring the integrity of existing and future contracts which do not cost ratepayers more than what they would be otherwise paying the HECO Companies is an important means of protecting the public against unintended consequences of a hurriedly conceived PBFiTs.
- Allowing a utility affiliate to engage in supplying power to its customers invites nasty and intractable conflict-of-interest issues.² To believe otherwise is to ignore the elephant

¹ On Page 2, the author states, "Per our assignment, this paper focuses on only on feed-in tariffs and makes no assessment about the relative merits of these various approaches."

² Consider, for example, the fact that the utility would be both the load forecaster and the buyer of PBFiT generation from its own affiliate (on behalf of ratepayers).

in the room. There are three PBFiT-participation models to choose from: (i) Ban utility affiliates from selling energy to HECO Company customers under FiT contracts; (ii) Allow them to compete for such opportunities with independent developers; and (iii) Ban independent developers. Option (i) offers the only way to eliminating conflict-of-interest problems. The second approach will maximize the incidence of conflict of interest and the need for micromanagement of the market by the Commission. In addition to the prospect of legal challenges, limiting participation in PBFiTs to utility affiliates will deprive Hawaii's consumers and economy from the benefits of competition in a green technologies industry that is inherently market driven.

- Questions regarding the scope of the PBFiTs in terms of location and size were repeatedly posed in the paper, but the issue of whether to limit the new tariffs to distribution-level applications was not raised. Non-utility resources interconnected at the transmission level already play a pivotal role in making Hawaii the leading state in terms of renewables' share of electric power generation. The majority of these resources supply power at avoided utility costs; a form of FiTs that ensures consumers would not pay more than they would have paid their power company for the energy purchased on their behalf. That is to say renewable energy is being procured without the need to pay premiums. In contrast, the amount of renewable capacity interconnected at the distribution level is comparatively severely lagging. The opportunities for PBFiT are at the low end of the voltage spectrum. Developing and implementing PBFiTs requires a complex process and one that necessitates adequate time and resources. The prudent strategy is to narrow the scope of the investigation and associated Commission efforts to distribution applications.
- Time imitations, multiplicity of issues, and lack of relevant experience with PBFiTs point to the need for a more cautious approach to fulfilling Hawaii's FiT goals. TPL recommends that the Commission start with a pilot PBFiT program at the distribution level of each HECO operating company that can be effectively improved and expanded with time.

3. Issues Warranting More Attention

Several issues identified in the paper deserve special attention:

- The author recommends the Commission "should require that the signatories to the Agreement [,] and encourage all [other] parties [,] to explain how these other incentives will interact with a PBFiT and what a PBFiT will do that the other incentives will not accomplish". While we concur with this requirement it is not realistic to expect that any party can adequately meet it in the extremely tight schedule governing the FiT proceeding. Accordingly, we urge the Commission to issue a do-no-harm companion ruling or directive to assure that no adoption of any PBFiT would end up negatively impacting existing power contracts between HECO Companies and independent power producers (IPPs) and owners of Qualifying Facilities (QFs).
- The paper also recommends the Commission require that the parties "suggest modifications to the current incentive mechanism that may be able to encourage the

³ NRRI Paper, Page 4.

development of renewable resources in similar amount as a PBFiT."⁴ The author then suggests example enhancements of current mechanisms including "establishing predictable long-term avoided costs that are the basis for payments for an extended period".⁵ We appreciate the fact that an organization as reputable as the NRRI is calling for attention to the need to not overlook the avoided cost mechanism that has enabled Hawaii to be at the forefront of encouraging high contribution by renewable energy resources to meeting electricity demand without spending one dollar on incentives to producers. (The avoided cost mechanism ensures that ratepayers are price-wise indifferent as to the source of electricity.) While we whole-heartedly agree for the need to encourage QF development, TPL strongly recommends investigation of two additional and very relevant issues:

- The risk to current intermittent renewable energy investments of facing increasing technical and/or economic curtailments as a result of growing infusion of new intermittent and must-take resources acquired through new bilateral contracts and PBFiTs. Does it make sense to buy future renewable energy at premium prices while curtailing renewable resources secured at prices guaranteed not to exceed utility costs of production? The practice of unilateral and inexplicable curtailment is not a phantom concern. It is already here. Production from TPL's wind energy farm at Pakini Nui was curtailed significantly by Hawaii Electric Light Company ("HELCO") in 2007 and 2008. Cutting production from as-available renewable resources priced at the utility's avoided cost to make room for higher priced generation contravenes ratepayers' interest and public policy objectives. The Commission should be very vigilant about avoiding PBFiT designs that could lead to undermining the goal of expanding renewable energy contributions at least cost to the citizens of Hawaii.
- o Based on our experience with Docket 7310, the Commission can and should improve upon due process and transparency practices in its proceedings. In particular, instituting PBFiTs as part of a fairly and efficiently balanced portfolio of renewables that does not undermine existing contracts will be seriously jeopardized if the due process is deficient and/or transparency is lacking as has been the case in Docket 7310. We cannot have significant decisions decided by a subset of parties in isolation from the majority, and it is blatantly unfair for the utility to rely on a black box model inaccessible to renewable energy generators such as TPL.
- The paper raises several unanswered questions concerning the types of PBFiTs to be developed and the desirability of setting a cap on the electric power to be acquired through them. We make three observations here:
 - TPL believes that these issues can be resolved only through quantifying the impacts on ratepayers of different levels of PBFiTs implementation and success scenarios while accounting for changes in avoided cost projections and the likelihood of imposing technical and/or economic curtailments on existing renewable energy generators.

⁴ Ibid, Page 4.

⁵ Ibid, Page 4

- o The PBFiT proponents' objective to provide financial incentives to disseminate high-cost renewable energy technologies is understandable but they should not lose sight of the need to avoid reducing the contributions of existing intermittent resources or degrading their property values. If developing PBFiT technologies is a must and curtailing current renewables production is unavoidable, then mitigation measures are warranted, including imposing caps on contracted PBFiT capacities and compensating owners of pre-existing renewable resources for incurred losses. There is no basis or need for discriminating between investments in green technologies.
- o If the Commission wants to stay the course with respect to the Government-HECO sponsored target date for implementing PBFiTs, it is not likely that this proceeding will produce meaningful and timely quantification of the impacts of PBFiT designs on ratepayers. In this case, we recommend that the Commission adopt a total cap covering all applications and fair management of project approval queue as described in Attachment A of this submittal.
- The NRRI paper suggests that the Commission may wish to consider focusing on "PBFiTs that merit priority attention based on the projects under consideration, or that might be more likely candidates for consideration based upon the existence of a reasonable PBFiT". While it is not clear what the phrase "projects under consideration" means, we concur with this suggestion as long as the do-no-harm principle is observed. We also recommend (as previously stated in this response) that the Commission should start with a pilot program. NRRI bases its suggestion to limit the scope of its initial efforts on the difficulty of managing numerous PBFiTs to cover the many types of technologies involved and location-dependent variations in development costs, productivity, etc. This is true. We also add that controlling the costs of the required subsidies while ensuring equitable treatment of all applicants necessitates micromanagement and administrative details beyond anything that this Commission, or for that matter any commission in the U.S., has ever experienced. This daunting task may explain the glaring fact that hardly two states have ventured into FiT programs.⁸ It should be noted that irrespective of how detailed the contemplated PBFiT is, it cannot be administered by the HECO Companies or any affiliates especially if such affiliates were to be allowed to participate in the new markets.

4. PBFiT Development Schedule

TPL supports the establishment of feed-in tariffs for promoting renewable energy growth in Hawaii. But instituting PBFiTs to increase renewables' share of electricity generation at a high pace of development represents a monumental paradigm shift that <u>cannot</u> be rushed through the

⁷ The NRRI paper implies that "typical" or prototype projects can be found for each technology and each island. Such simplification may not be possible in view of the substantial intra-island topographical, climatic and land-value variations. (Consider for example the variations across Maui and Big Island.) Fairness and economic efficiency will require several PBFiTs for each technology and each island.

⁶ Ibid. Page 6.

⁸ Actually, the California Public Utilities Commission (CPUC) made an attempt in the late 1980s and early 1990s to establish a location-dependent feed-in tariff for IPPs and QFs. The CPUC's frustration from the failed effort is probably the primary reason for its rush into a market restructuring that led to the 2000/2001 meltdown that caused California losses exceeding \$40 billion.

proposed schedule, including the response times suggested in the NRRI paper. Developing sound and efficient least-cost PBFiTs should not be dictated by minority decisions or the latest headlines. The ratebases of the Islands' systems – especially on the Big Island and Maui – are too small to subject them to experimental and hurriedly conceived subsidization programs fashioned after European models. Ignoring Hawaii's unique market circumstances and consumers' vulnerabilities could lead to unacceptable cost shifts between rate classes, stranded assets, costly disruption of service from existing QFs, sharp escalation of retail rates and even heightened risk of death spirals for the HECO Companies.

If the Commission intends to adopt a schedule designed to meet the FiT implementation deadline targeted by the Agreement between the State Government and the HECO Companies, we then recommend that the Commission start with a pilot-scale development of PBFiTs and that the total allowable subscription to the new tariffs be limited to the projected increase in electricity demand for each utility over the ensuing 12 months. We also urge the Commission to adopt the principle of *do-no-harm* to protect existing renewable energy investments that have been serving Hawaii without the burden of subsidizations (as discussed earlier in this document).

5. Project Information Solicitation

The availability of accurate and detailed costing and technical data about candidate renewable energy technologies is essential to designing equitable and efficient PBFiTs. However, obtaining such information from competing developers as envisioned in the NRRI paper in sufficient amounts is practically improbable. It is in the interest of every developer to see that the Commission adopts tariffs that could enable it to secure the necessary financing and an adequate profit margin. But no developer is anxious to reveal its actual expectations about crucial information such as the cost of land, project size, etc. Developers' concerns over releasing sensitive business data are not likely to be adequately addressed by a protective order. TPL proposes that the Commission adopt a blind information solicitation process that can assure the anonymity of the sources of the gathered data. We will be happy to provide details on how to accomplish this at the Commission's request.

Attachment A

PBFiT Project Enrollment Management

The NRRI paper poses a number of important queue management issues. TPL proposes the following principles for managing project enrollment in a PBFiT program:⁹

- Capping PBFiT enrollment on a total basis for all technologies:
 - o The Commission should set an initial total cap for each utility equal to next year's forecasted increase in electricity demand plus an adequate reserve margin adder if needed;¹⁰
 - o The total cap should be updated downward to account for projects entering the queue and upwards for projects exiting it; and
 - The total cap should be updated once a year by accounting for subsequent years' demand growth;

Entering the queue:

- o Entry into the queue is possible as long as the cap has not been reached;
- o To enter a queue, the interested developer must demonstrate that it secured all needed permits to install and operate the targeted generating facility; and
- Every applicant seeking to enter the queue must pay a queue management fee and a reservation deposit to be refunded when its project successfully exits the queue by coming on line before the expiry of its residency in the queue;

• Residency in the queue:

- o A developing (applicant) project cannot stay in the queue past a Technology-Specific Maximum Allowable Residency Period (TSMARP); and
- o The Commission should determine the TSMARPs on the basis of industry surveys of construction and installation times;

Exiting the queue:

- o An unfinished project can voluntarily exit its queue before the expiration of its TSMARP but will have to forfeit its queue reservation deposit;¹¹
- o A project is deemed to have exited the queue with forfeiture of the reservation deposit upon failing to come on line before its TSMARP has expired; and
- A developing project that comes on line before the expiration of its residency will be considered to have successfully exited the queue and will be refunded the reservation deposit.

⁹ Although, for the sake of brevity, the case of having multiple (parallel) queues for managing separate enrollments by different renewable generation technologies will not be discussed here, the outlined principles are essentially the same.

¹⁰ If a pilot project approach is used, the initial cap can be less than the projected load growth.

The risk of forfeiture should be high enough to bar phantom projects and prevent gaming.

CERTIFICATE OF SERVICE

The foregoing Comments to Scoping Paper was served on the date of filing by mail,

postage prepaid, hand delivery, or electronically transmitted to each such Party.

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